

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Carlo BALDOVINO, et al.  
Serial No. : 10/590,227  
For : **TOOTHED BELT**  
Filed : May 14, 2007  
Examiner : Anna M. Momper  
Art Unit : 3657  
Confirmation No. : 6956

**Filed via EFS-Web  
On June 6, 2011**

745 Fifth Avenue  
New York, NY 10151

**SUBMISSION OF DECLARATION OF MARCO DI MECO UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Applicants submit herewith a Declaration Under 37 C.F.R. § 1.132 in support of the Amendment that was filed on April 11, 2011. The 1.132 Declaration addresses all the issues that the Examiner mentioned in the Final Office Action of November 9, 2010.

Applicants therefore respectfully request that the rejection of the claims under 35 U.S.C. §103(a) be reconsidered and withdrawn.

The Commissioner is authorized to charge any additional fee occasioned by this paper, or credit any overpayment of such fees, to Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP  
Attorneys for Applicants

By: 

Ronald R. Santucci

Reg. No. 28,988

Frederick W. Dour

Reg. No. 39,174

Telephone: (212) 588-0800

Facsimile: (212) 588-0500

U. S. Patent Application No. 10/590,227  
Declaration of Marco Di Meco

PATENT  
930063-2031

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Carlo BALDOVINO, et al.  
Serial No. : 10/590,227  
For : **TOOTHED BELT**  
Filed : May 14, 2007  
Examiner : Anna M. Momper  
Art Unit : 3657  
Confirmation No. : 6956

**Filed via EFS-Web  
On June 6, 2011**

745 Fifth Avenue  
New York, NY 10151

**DECLARATION OF MARCO DI MECO UNDER 37 C.F.R. §1.132**

Commissioner for Patents, P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I, Marco Di Meco, declare and state that:

1. I make this statement in connection with U.S. Application Serial No. 10/590,227 ("the '227 application").
2. I received a Chemical Engineer from the University of L'Aquila (IT) in 1991.
3. I am the responsible for Research and Development and employee of Dayco Europe Srl which specializes in belts.
4. I have been employed in Dayco Europe Srl, the original assignee of the '227 application, since 1995. In view of my education and experience, I consider myself to be an expert in the field to which this application pertains.

5. I am familiar with the prosecution history of the '227 application, up to and including Final Office Action ("the Office Action") mailed on the November 9, 2010 and the response to the Final Office Action submitted on April 11, 2011.
6. Claims 1, 3-7, 11-31, 35-51, 53-76, 78-82, and 86-99 are pending in this application.
7. Claims 1, 4, 25, 26, 28, 46, 51, 54, and 71-76 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 4,099,422 to Cicognani et al. ("Cicognani") in view of U.S. Patent No. 2002/0098935 to Danhauer et al. ("Danhauer").
8. Claims 3, 27, 53, and 78 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and further in view of JP 02-248741 to Onoe et al. ("Onoe").
9. Claims 5-7, 29-31, 55-57, and 80-82 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and further in view of U.S. Patent No. 4,498,891 to Mashimo et al. ("Mashimo").
10. Claims 11, 12, 35, 36, 58, 59, 86, and 87 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer in further view of U.S. Patent No. 6,945,891 to Knutson ("Knutson").
11. Claims 13, 14, 37, 38, 60, 61, 88, and 89 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and Knutson, and further in view of U.S. Patent No. 7,396,884 to Acten ("Acten").
12. Claims 15-18, 22, 39-42, 50, 62-65, and 90-93 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer in further view of U.S. Patent No. 7,056,249 to Osaka et al. ("Osaka").
13. Claim 43 is rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and further in view of Mashimo.
14. Claims 19-21, 44, 45, 66-69, and 94-97 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and Osaka and further in view of Mashimo.

15. Claims 23, 98, and 99 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer, Osaka and Mashimo, further in view of Knutson.
16. Claim 47 is rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and further in view of Knutson.
17. Claims 24, 48, and 70 are rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and further in view of U.S. Patent No. 5,306,213 to Nakajima et al. ("Nakajima").
18. Claim 49 is rejected under § 103(a) as allegedly being unpatentable over Cicognani in view of Danhauer and Nakajima, and further in view of U.S. Patent Application Publication No. 2004/0127316 to Hashimoto et al. ("Hashimoto").
19. Of the pending claims, claims 1, 25, 51, and 72 are independent. Each of the currently amended independent claims, recites the following or similar form, "inserts compris[ing] twisted yarns produced from at least a first and a second material, wherein the first material comprises glass fibers and the second material comprises carbon fibers, and twisted yarns of the first material are wound around a twisted yarn of the second material, covering the second material entirely; and wherein said resistant inserts have a modulus of greater than 28 N/mm." Cicognani, Danhauer, and Onoe do not disclose the above recited limitations and an ordinarily skilled artisan would have no reason to combine the art in the manner suggested in the Office Action.
20. The materials disclosed in Danhauer, with the exception of carbon and steel, have a modulus insufficient to provide the inventive belt with sufficient strength to function as intended.
21. Carbon and steel, also disclosed in Danhauer, may have a sufficient modulus for a toothed belt in an oil wet environment but such high modulus materials are known in the art to provide bonding problems with the belt material. This problem with adhesion is a problem the claimed belt sought to address.

22. The test results presented in the Exhibits section of the response filed April 11, 2011, represent the results of testing that I personally performed, or tests performed under my direction and with my knowledge, in the discovery of the presently claimed belt.
23. The tests were performed according to international standard ISO 12046 for Tension-cord adhesion test. The test is known in the art to evidence the adhesion between reinforcing cords in a belt and the belt body material.
24. The tests evaluated the adhesion between a common rubber belt body (designated LAETITIA) and two different cord constructions. The first cord was made from a single yarn of carbon fiber. The second cord had a core of the first material surrounded by glass fiber yarns as presently claimed.
25. The test results indicated a mean value for adhesion for the carbon cord of 1088 Newtons. The claimed cord construction had a mean value for adhesion of 1714 Newtons.
26. The 57% improvement in adhesion marks a significant and unexpected result in adhesion that was not disclosed or rendered predictable by any cited reference.
27. One of ordinary skill in the art would expect the test results would be similar to, or at least proportional to, cord adhesion tests performed in an oil wet environment as the oil wet environment would not alter the adhesion behavior.
28. Improved adhesion as demonstrated by the tests makes it possible to produce narrow belts with a high modulus insert capable of use in substantially continuous contact with oil or partially immersed in oil.

29. All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true. These statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: May 27th 2011

  
Marco Di Meco